

REMARKS

Claims 1-18 and 20-40 remain pending in the application. Claims 26, 38, and 40 have been amended.

In the Office Action mailed January 10, 2005, the Examiner found claims 1-18, 20-25, and 31-37 to be allowable. Claims 26-30 and 38-40 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,198,645 (“Kotowski et al.”).

Applicants respectfully request reconsideration of the final rejection in light of the amendments made to the rejected claims as set forth above and explained in more detail hereinbelow.

Independent claim 26 has been amended to now recite a set of pumping stages that include charge capacitors utilizing a plurality of switches forming a switching network to separately couple any one of the charge capacitors to an input terminal and an output terminal such that for any pumping operation any combination of the charge capacitors may selectively not be used, and further including applying signals to the switching network coupled to the pumping stages, the signals for controlling whether the pumping stages should operate in a parallel or serial fashion.

In view of the Examiner’s remarks that the primary reason for allowance of the other claims is that the references do not suggest or motivate combining a variable stage pump with considerable capacitor arrangements in each stage to be fully configurable (serial or parallel arrangement of capacitors), and the stages as a whole can also be configured in serial or parallel arrangements, applicants respectfully submit that claim 26, as well as dependent claims 27-30 are now clearly in condition for allowance.

Independent claim 38 is directed to a charge pump that comprises at least two pumping stages, each pumping stage comprising at least two charge capacitors; and a switching network configured to separately couple and uncouple the at least two charge capacitors to input and output lines such that for any pumping operation any combination of the at least two charge capacitors may not be used, and the switching network further configured to couple the at least two pumping stages in a serial or parallel arrangement. Applicants respectfully submit that independent claim 38 and corresponding dependent claim 39 are allowable for the reasons why

claim 26 is allowable, *i.e.*, the references do not teach or suggest fully configurable capacitor arrangement and pumping stages.

Independent claim 40 is directed to a circuit that comprises at least two pumping lines formed of at least two capacitors each and a plurality of switches configured to couple and uncouple each of the at least two capacitors individually to provide configurable phases between each of the at least two capacitors, and the plurality of switches further configured to configure the at least two pumping lines in serial or parallel arrangements. Applicants respectfully submit that claim 40 is allowable for the reasons why claim 38 and claim 26 are allowable as discussed above.

In view of the foregoing, applicants respectfully submit that all of the claims in this application are now clearly in condition for allowance. In the event the Examiner finds minor informalities that can be resolved by telephone conference, the Examiner is urged to contact applicants' undersigned representative by telephone at (206) 622-4900 in order to expeditiously resolve prosecution of this application. Consequently, early and favorable action allowing these claims and passing this case to issuance is respectfully solicited.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,  
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